CLAIMS

1. A method of fabricating a hologram screen, comprising the steps of arranging at least a mirror at an end portion or in the neighborhood of an end portion of a light diffuser, said mirror being extended toward a plurality of photosensitive members, forming a plurality of holograms by exposing a plurality of said photosensitive members individually using at least a reference beam and a plurality of object beams passed through said light diffuser, and two-dimensionally arranging and integrating a plurality of said holograms thereby to form a hologram screen,

wherein the mirror arranged nearer to the light source of the reference beam is replaced with a mirror having a different length of extension from said light diffuser in accordance with the position of each of the photosensitive members to be exposed individually thereby to expose said photosensitive member.

2. A method of fabricating a hologram screen according to claim 1,

wherein the length of extension of said reference beam-side mirror is set to a larger value when exposing the photosensitive member arranged nearer to the light source of said reference beam than when exposing the photosensitive member arranged farther from the light source of said reference beam.

3. A method of fabricating a hologram screen, comprising the steps of arranging at least a mirror at an end portion or in the neighborhood of an end portion of a light diffuser, said mirror being extended toward a plurality of photosensitive members, forming a plurality of holograms by exposing a plurality of said photosensitive members individually using at least a reference beam and a plurality of object beams passed through said light diffuser, and two-dimensionally arranging and integrating a plurality of said holograms thereby to form a hologram screen,

wherein, when exposing the photosensitive member arranged nearer to the light source of said reference beam, the distance between said photosensitive member and said light diffuser with said mirror extended therefrom is set to a value smaller than the distance between the photosensitive member and said diffuser with said mirror extended therefrom for exposing the photosensitive member arranged farther from said light source of said reference beam.

4. A method of fabricating a hologram screen, comprising the steps of arranging at least a mirror at an end portion or in the neighborhood of an end portion of a light diffuser, said mirror being extended toward a plurality of photosensitive members, forming a plurality of holograms by exposing a plurality of said photosensitive members individually using at least a reference beam and a plurality of object beams passed through said light diffuser, and two-dimensionally arranging and integrating a plurality of said holograms thereby to form a hologram screen,

wherein, when exposing the photosensitive member arranged nearer to the light source of said reference beam, the position of said photosensitive member relative to said light diffuser having said mirror extended therefrom is moved in such a manner as to increase the angle that the straight light connecting the forward end portion of the reference beam-side mirror arranged nearer to the light source of said reference beam and the end portion of said photosensitive member nearer to said light source of said reference beam forms with the normal to the end portion of said photosensitive member.

5. A method of fabricating a hologram screen, comprising the steps of arranging at least a mirror at an end portion or in the neighborhood of an end portion of a light diffuser, said mirror being extended toward a plurality of photosensitive members, forming a plurality

of holograms by exposing a plurality of said photosensitive members individually using at least a reference beam and a plurality of object beams passed through said light diffuser, and two-dimensionally arranging and integrating a plurality of said holograms thereby to form a hologram screen,

wherein the distance over which said reference beam is projected on said photosensitive member is set to a value shorter than the distance over which the image light is projected on the hologram screen in operation.

6. A method of fabricating a hologram screen according to claim 5,

wherein the distance over which said reference beam is projected on said photosensitive member is set to a value shorter than the distance over which the image light is projected on the hologram screen in operation, and the length of extension of said reference beam-side mirror is changed further to the extent that the incidence of said reference beam to said photosensitive beam is not blocked by said reference beam-side mirror arranged nearer to the light source of said reference beam.

7. A method of fabricating a hologram screen, comprising the steps of arranging at least a mirror at an end portion or in the neighborhood of an end portion of a light diffuser, said mirror being extended toward a plurality of photosensitive members, forming a plurality of holograms by exposing a plurality of said photosensitive members individually using at least a reference beam and a plurality of object beams passed through said light diffuser, and two-dimensionally arranging and integrating a plurality of said holograms thereby to form a hologram screen,

wherein the angle at which said reference beam is projected on said photosensitive member is set to a value smaller than the angle at which the image light

is projected on said hologram screen in operation.

8. A method of fabricating a hologram screen, comprising the steps of arranging at least a mirror at an end portion or in the neighborhood of an end portion of a light diffuser, said mirror being extended toward a plurality of photosensitive members, forming a plurality of holograms by exposing a plurality of said photosensitive members individually using at least a reference beam and a plurality of object beams passed through said light diffuser, and two-dimensionally arranging and integrating a plurality of said holograms thereby to form a hologram screen,

wherein the angle at which said reference beam is projected on said photosensitive member is set to a value larger than the angle at which the image light is projected on said hologram screen in operation, and wherein the length of extension of said reference beam-side mirror is further to the extent that the incidence of said reference beam to said photosensitive member is not blocked by said reference beam-side mirror located nearer to the light source of said reference beam.

9. A hologram imaging apparatus for exposing a plurality of photosensitive members when fabricating a hologram screen by radiating at least a reference beam and a plurality of object beams passed through a light diffuser individually on a plurality of said photosensitive members thereby to form a plurality of holograms, which are arranged and integrated with each other into a hologram screen, the apparatus comprising:

means for holding a plurality of said photosensitive members at positions corresponding to the positions for subsequent arrangement and integration; and

a plurality of mirrors arranged to extend toward said photosensitive members at or in the neighborhood of an end portion of said light diffuser;

wherein the reference beam-side mirror arranged nearer to the light source of said reference

beam is so configured that the length of extension thereof from said light diffuser can be changed.

10. A hologram imaging apparatus according to claim 9,

wherein said reference beam-side mirror can be replaced with another mirror having a different length of extension.

11. A hologram imaging apparatus for exposing a plurality of photosensitive members when fabricating a hologram screen by radiating at least a reference beam and a plurality of object beams passed through a light diffuser individually on a plurality of said photosensitive members thereby to form a plurality of holograms, which are two-dimensionally arranged and integrated with each other into a hologram screen, the apparatus comprising:

means for holding a plurality of said photosensitive members at positions corresponding to the positions for subsequent arrangement and integration; and

a plurality of mirrors arranged to extend toward said photosensitive members at or in the neighborhood of an end portion of said light diffuser;

wherein said holding means can be moved in the direction parallel to said photosensitive members.